

# PATENT COOPERATION TREATY

From the  
INTERNATIONAL SEARCHING AUTHORITY

To:  
ANITA L. MEIKLEJOHN  
FISH & RICHARDSON P.C.  
225 FRANKLIN STREET  
BOSTON, MA 02110-2804

## PCT

WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY

(PCT Rule 43bis.1)

Applicant's or agent's file reference <b>14184-051WO1</b>		Date of mailing (day/month/year) <b>12 MAY 2005</b>
FOR FURTHER ACTION See paragraph 2 below		
International application No. <b>PCT/US04/34385</b>	International filing date (day/month/year) <b>18 October 2004 (18.10.2004)</b>	Priority date (day/month/year) <b>18 October 2003 (18.10.2003)</b>
International Patent Classification (IPC) or both national classification and IPC <b>IPC(7): A01N 43/40,43/64,43/78,43/76,43/80,43/56; A61K 31/435,31/44,31/41,31/425,31/42,31/415; C07D 207/00 and US Cl.: 514/277,332,334,335,359,365,372,374,378,403; 548/400; 546/1</b>		
Applicant <b>MICROBIA, INC.</b>		

1. This opinion contains indications relating to the following items:

- ☒ Box No. I      Basis of the opinion
- ☐ Box No. II      Priority
- ☒ Box No. III      Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV      Lack of unity of invention
- ☒ Box No. V      Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI      Certain documents cited
- ☐ Box No. VII      Certain defects in the international application
- ☐ Box No. VIII      Certain observations on the international application

### 2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

Name and mailing address of the ISA/ US Mail Stop PCT, Attn: ISA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703) 305-3230	Authorized officer <i>Gregory W. Mitchell</i> Gregory W. Mitchell Telephone No. 571-272-0600
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**WRITTEN OPINION OF THE  
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/US04/34385

**Box No. I Basis of this opinion**

1. With regard to the language, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language \_\_\_\_\_, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any nucleotide and/or amino acid sequence disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

☐ a sequence listing

☐ table(s) related to the sequence listing

b. format of material

☐ in written format

☐ in computer readable form

c. time of filing/furnishing

☐ contained in international application as filed.

☐ filed together with the international application in computer readable form.

☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

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Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. The questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-obvious), or to be industrially applicable have not been examined in respect of:

- ☐ the entire international application  
☒ claims Nos. 28,30,32,34,36,40,43 and 44

because:

- ☐ the said international application, or the said claim Nos. \_\_\_\_\_ relate to the following subject matter which does not require an international preliminary examination (*specify*):

- ☒ the description, claims or drawings (*indicate particular elements below*) or said claims Nos. 28,30,32,34,36,43 and 44 are so unclear that no meaningful opinion could be formed (*specify*):

The claims are improper multiple dependent claims.

- ☐ the claims, or said claims Nos. \_\_\_\_\_ are so inadequately supported by the description that no meaningful opinion could be formed.
- ☐ no international search report has been established for said claims Nos. \_\_\_\_\_
- ☐ the nucleotide and/or amino acid sequence listing does not comply with the standard provided for in Annex C of the Administrative Instructions in that:
- |                            |                          |                                   |
|----------------------------|--------------------------|-----------------------------------|
| the written form           | <input type="checkbox"/> | has not been furnished            |
|                            | <input type="checkbox"/> | does not comply with the standard |
| the computer readable form | <input type="checkbox"/> | has not been furnished            |
|                            | <input type="checkbox"/> | does not comply with the standard |

- ☐ the tables related to the nucleotide and/or amino acid sequence listing, if in computer readable form only, do not comply with the technical requirements provided for in Annex C-bis of the Administrative Instructions.
- ☐ See Supplemental Box for further details.

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**Box No. V Reasoned statement under Rule 43 bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement**

**1. Statement**

Novelty (N)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO
Inventive step (IS)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO
Industrial applicability (IA)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO

**2. Citations and explanations:**

Claims 1-2, 5, 9-10, 13-21 and 38-39 lack novelty over THOMSEN et al. because THOMSEN et al. discloses a compound as instantly claimed.

Claims 1-23 and 38-39 lack an inventive step over '098 and '505 because '098 and '505 teach a genus of compounds that overlaps with the compounds as herein claimed. '098 and '505 also teach pharmaceutical compositions comprising the compounds as herein claimed.

Claims 1-2, 5, 9-10, 13, 23, 26-27, 29, 31, 35 and 38-39 lack novelty over CODD et al. CODD et al. discloses the compounds as herein claimed (e.g. valdecoxib, parecoxib, etc.). Pharmaceutical compositions comprising the compounds are disclosed for treating pain (e.g. neuropathic pain, etc.), inflammation, neurological disorders, etc.

Claims 24-25, 33, 37, 41 and 42 lack an inventive step over CODD et al. CODD et al. discloses the compounds as herein envisioned (e.g. valdecoxib, parecoxib, etc.). Pharmaceutical compositions are disclosed for the treatment of pain, inflammation, neurological disorders, etc. Accordingly, it would have been obvious to one of ordinary skill in the art to treat specific types of pain (e.g. nociceptive pain) or neurological disorders (e.g. insomnia, anxiety, etc.).

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**Supplemental Box**

In case the space in any of the preceding boxes is not sufficient.

**V.1. Reasoned Statements:**

The opinion as to Novelty was positive (Yes) with respect to claims 3-4, 6-8, 11-12, 22, 24-25, 33, 37, 41-42

The opinion as to Novelty was negative (No) with respect to claims 1-2, 5, 9-10, 13-21, 23, 26-27, 29, 31, 35, 38-39

The opinion as to Inventive Step was positive (Yes) with respect to claims NONE

The opinion as to Inventive Step was negative (NO) with respect to claims 1-27, 29, 31, 33, 35, 37-39, 41-42

The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-27, 29, 31, 33, 35, 37-39, 41-42

The opinion as to Industrial Applicability was negative (NO) with respect to claims NONE